

Title (en)  
Hydraulic tensioner

Title (de)  
Hydraulische Spannvorrichtung

Title (fr)  
Tendeur hydraulique

Publication  
**EP 1498638 A3 20081217 (EN)**

Application  
**EP 04013083 A 20040603**

Priority  
JP 2003274079 A 20030714

Abstract (en)  
[origin: EP1498638A2] In a hydraulic tensioner (100), an oil pressure control recess (124), at a proximal end (121a) of a cylindrical, plunger-receiving hole (121), receives from an oil supply, and also receives oil which oozes past a check valve (130) and an inner sleeve (150) inside the plunger (110), thereby returning the oil, which would leak to the outside in a conventional hydraulic tensioner, to the interior of the plunger (110).

IPC 8 full level  
**F16H 7/08** (2006.01)

CPC (source: EP US)  
**F16H 7/0836** (2013.01 - EP US); **F16H 2007/0806** (2013.01 - EP US); **F16H 2007/0812** (2013.01 - EP US); **F16H 2007/0859** (2013.01 - EP US); **F16H 2007/0891** (2013.01 - EP US)

Citation (search report)  
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• [A] DE 19538401 A1 19961212 - SCHAEFFLER WAEZLAGER KG [DE]  
• [A] DE 9409155 U1 19951012 - WINKLHOFER & SOEHNE GMBH [DE]  
• [A] US 2001007841 A1 20010712 - NAKAKUBO KATSUYA [JP]

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL HR LT LV MK

DOCDB simple family (publication)  
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JP 2005036873 A 20050210; JP 3805762 B2 20060809; US 2005014587 A1 20050120; US 7226376 B2 20070605

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